

**RECEIVED
CENTRAL FAX CENTER****APR 28 2010**Serial No. 10/518,278
Art Unit: 2473Docket No.: PU020290
Customer No. 24498**Listing and Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously presented) A broadcast router, comprising:
a first reference input;
a second reference input;
a reference select circuit coupled to said first and second reference inputs; and
at least one router component coupled to said reference select circuit;
wherein said reference select circuit: (1) passes a first signal applied to said first reference input to said at least one router component as a first reference signal and a second signal applied to said second reference input to said at least one router component as a second reference signal in response to determining that said first and second signals are error-free; (2) passes said first signal to said at least one router component as said first reference signal and as said second reference signal in response to determining that said first signal is error-free and said second signal is not error-free; and (3) passes said second signal to said at least one router component as said first reference signal and as said second reference signal in response to determining that said first signal is not error-free and said second signal is error-free.
2. (Previously presented) The apparatus of claim 1, wherein said at least one router component further comprises a router matrix.
3. (Previously presented) The apparatus of claim 1, wherein said at least one router component further comprises a transmit expansion port.
4. (Previously presented) The apparatus of claim 1, wherein said at least one router component further comprises at least one receive expansion port.
5. (Previously presented) A broadcast router, comprising:
a router matrix having an input side and an output side;

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N data inputs coupled to said input side of said router matrix, each one of said N data inputs configured for providing an input data stream to said router matrix;

M data outputs coupled to said output side of said router matrix, each one of said M data outputs configured for providing an output data stream from said router matrix;

a first reference input coupled to said input side of said router matrix said first reference input configured for application of a first reference signal thereto; and

a second reference input coupled to said input side of said router matrix, said second reference input configured for selective application of either a second reference signal or a redundancy of said first reference signal thereto,

wherein said broadcast router further comprises a reference select circuit coupled between said first and second reference inputs and a routing engine, said reference select circuit configured to (1) pass a first signal applied to said first reference input to said routing engine as a first reference signal and a second signal applied to said second reference input to said routing engine as a second reference signal in response to determining that said first and second signals are error-free; (2) pass said first signal to said routing engine as said first reference signal and as said second reference signal in response to determining that said first signal is error-free and said second signal is not error-free; and (3) pass said second signal to said routing engine as said first reference signal and as said second reference signal in response to determining that said first signal is not error-free and said second signal is error-free.

6. (Previously presented) The apparatus of claim 5, wherein said routing engine is coupled between said N data inputs and said M data outputs and said routing engine is configured to apply selected ones of said N data inputs to said M data outputs.

7. (Canceled)

8. (Currently amended) A method for selectively providing multiple or redundant reference inputs to a broadcast router, comprising:

providing a broadcast router having first and second reference inputs;
applying a first reference signal to said first reference input; and

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applying one of said first reference signal or a second reference signal to said second reference input such that said first reference signal is applied to said second reference input if a user desires that said broadcast router operate with redundant reference signals, and said second reference signal is applied to said second reference input if said user desires that said broadcast router operate with multiple reference signals,

~~if a user desires that said broadcast router operate with redundant reference signals, applying said first reference signal to said second reference input, and~~

~~if said user desires that said broadcast router operate with multiple reference signals, applying a second reference signal to said second reference input,~~

wherein said broadcast router includes a reference select circuit to which said first and second reference inputs are fed, said reference select circuit configured to (1) pass signals applied to said first reference input to reference signal-demanding components of said broadcast router as a first reference input signal and signals applied to said second reference input to said reference signal-demanding components of said broadcast router as a second reference input signal in response to determining that said signals applied to said first and second reference inputs are error-free; (2) pass signals applied to said first reference input to said reference signal-demanding components of said broadcast router as said first reference input signal and as said second reference input signal in response to determining that signals applied to said first reference input are error-free but signals applied to said second reference input are not error-free; and (3) pass signals applied to said second reference input to said reference signal-demanding components of said broadcast router as said first reference input signal and as said second reference input signal in response to determining that signals applied to said first reference input are not error-free but signals applied to said second reference input are error free.

9. (Canceled)

10. (Previously presented) The method of claim 8, wherein said reference signal-demanding components are reference signal-insensitive.

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11. (Previously presented) The apparatus of claim 1, wherein at least one of said reference inputs is configured to readily receive either independent or redundant reference signals without modification of the at least one of said reference inputs by a user.
12. (Previously presented) The apparatus of claim 1, wherein said at least one router component synchronizes at least one other signal by aligning said at least one other signal with at least one of said reference signals once while processing said at least one other signal.
13. (Previously presented) The apparatus of claim 5, wherein at least one of said reference inputs is configured to readily receive either independent or redundant reference signals without modification of the at least one of said reference inputs by a user.
14. (Previously presented) The apparatus of claim 5, wherein said router matrix synchronizes at least one other signal by aligning said at least one other signal with at least one of said reference signals once while processing said at least one other signal.
15. (Previously presented) The method of claim 8, wherein at least one of said reference inputs is configured to readily receive either independent or redundant reference signals without modification of the at least one of said reference inputs by said user.
16. (Previously presented) The method of claim 8, further comprising the step of:
synchronizing at least one other signal by aligning said at least one other signal with at least one of said reference signals once while processing said at least one other signal.